



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY, DOCKET NO.
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09/252,828 02/19/99 DONG

HM12/0828

EXAMINER

COOK, L

FOLEY & LARDNER  
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SUITE 500  
WASHINGTON DC 20007-8696

ART UNIT

PAPER NUMBER

1641

DATE MAILED: 08/28/01 25

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

## Office Action Summary

Application No.

09/252,828

Applicant(s)

DONG ET AL.

Examiner

Lisa V. Cook

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 25-38, 40 and 42-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 25-38, 40, AND 42-47 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Petition*

1. Applicants petition to withdraw the holding of abandonment filed 6/14/01 in paper no. 24 was fully and carefully considered. The petition was granted. Accordingly the following restriction requirement is posed to clarify all outstanding claims and include the amendment wherein all claims previously reciting seq. id. No.1 are now directed to seq. id. No.2 (Paper #21, filed 2/28/01, amending claims 27-29, 34, 36-38, and 40).

### *Election/Restrictions*

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 25, 26, 34-36, 42, and 43, are drawn to a purified recombinant glycopolypeptide (product) comprising 40% to 60% carbohydrate by weight capable of binding human spermatozoa, classified in class 530, subclass 322 and class 530, subclass 395 for example.
- II. Claims 27-33 and 37, are drawn to a purified recombinant glycopolypeptide (product) having between 41 and 400 amino acids binding human spermatozoa including an active portion homologous with seq. id. No. 2 and a predicted O-glycosylation site at serine corresponding to position 344 of human spermatozoa, classified in class 530, subclass 322 and class 530, subclass 395 for example.
- III. Claims 38 and 40, are drawn to a glycopolypeptide (product), which binds human spermatozoa wherein the polypeptide portions is smaller than 25kd or 10kd and comprises seq. id. No.2, classified in class 530, subclass 322 and class 530, subclass 395 for example.

- IV. Claims 44-47, are drawn to a purified glycopeptide/glycoprotein (product) comprising seq. id. No.1, classified in class 530, subclass 322 and class 530, subclass 395 for example.

3. The inventions are distinct, each from the other because of the following reasons:

Inventions I, II, III and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01).

In the instant case, each of the different product inventions of Groups I, II, III, and IV are distinct because they are drawn to diverse compositions representing independent and different compounds (having separate searchable limitations – i.e. carbohydrate composition, amino acid length, homology, glycosylation, etc). Therein the inventions are drawn to a plurality of patentably distinct compositions having diverse structural limitations/characteristics.

With respect to the separate amino acid structures and/or the nucleic acid structures having different sequence identification numbers, they bear distinct structural or biochemical properties having different binding epitopes (claims references diverse sequence id. Nos. 1 and 2). **Therefore, each disclosed patentably distinct amino acid sequences and nucleic acid sequence is considered a separate invention.** See Official Gazette 1232 OG 242(116) March 21, 2000. Therein the O.G. notice permits the examiner to examine up to ten sequences per application based on the use of US PTO resources. Resources are now stretched to the limit, such that only one sequence should be searched per application.

It is recognized that although the search for the inventions may overlap they are not totally co-extensive, where by the search for one would fully encompass the search for the others. Because these inventions are distinct for the reasons given above and the search required for each sequence is not mutually inclusive (i.e. the search for one invention is not required for the other inventions) restriction for examination purposes as indicated is proper.

4. Because these inventions are distinct for the reasons given above and have acquired separate status in the art as shown by their different classification, recognized divergent subject matter and because the search required for each invention is not substantially coextensive with the search required for the remaining invention, restriction for examination purposes as indicated is proper. Please note that the classifications in the restriction are illustrative only and do **not** represent all the classes and subclasses which must be searched for each invention; nor is the search limited to issued US patents, but rather includes published foreign patents and applications as well as literature search, which in this case would be divergent for each of the claimed inventions.

5. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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6. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

8. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Group 1641 Fax number is (703) 308-4242, which is able to receive transmissions 24 hours/day, 7 days/week.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa V. Cook whose telephone number is (703) 305-0808. The examiner can normally be reached on Monday-Friday from 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le, can be reached on (703) 305-3399.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.



*Lisa V. Cook*

**Patent Examiner**

Art Unit 1641

**CM1-7B17**

**8/20/01**



**LONG V. LE**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 1600**

08/26/01